

Figure 1A

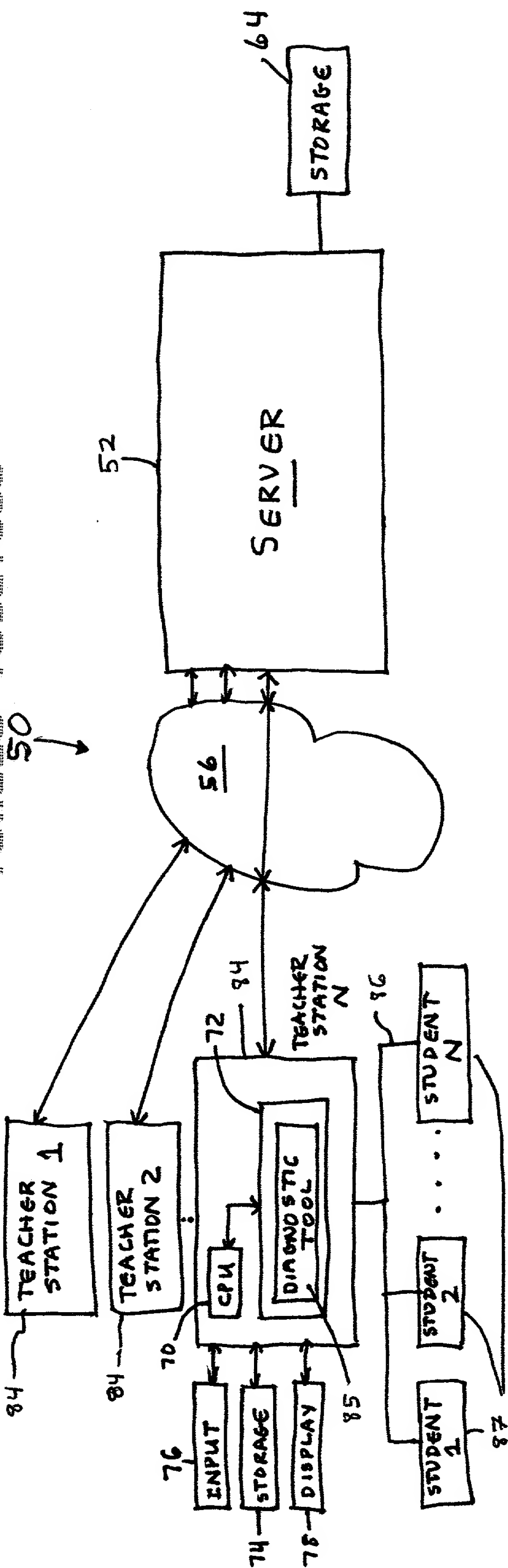


FIGURE 1B

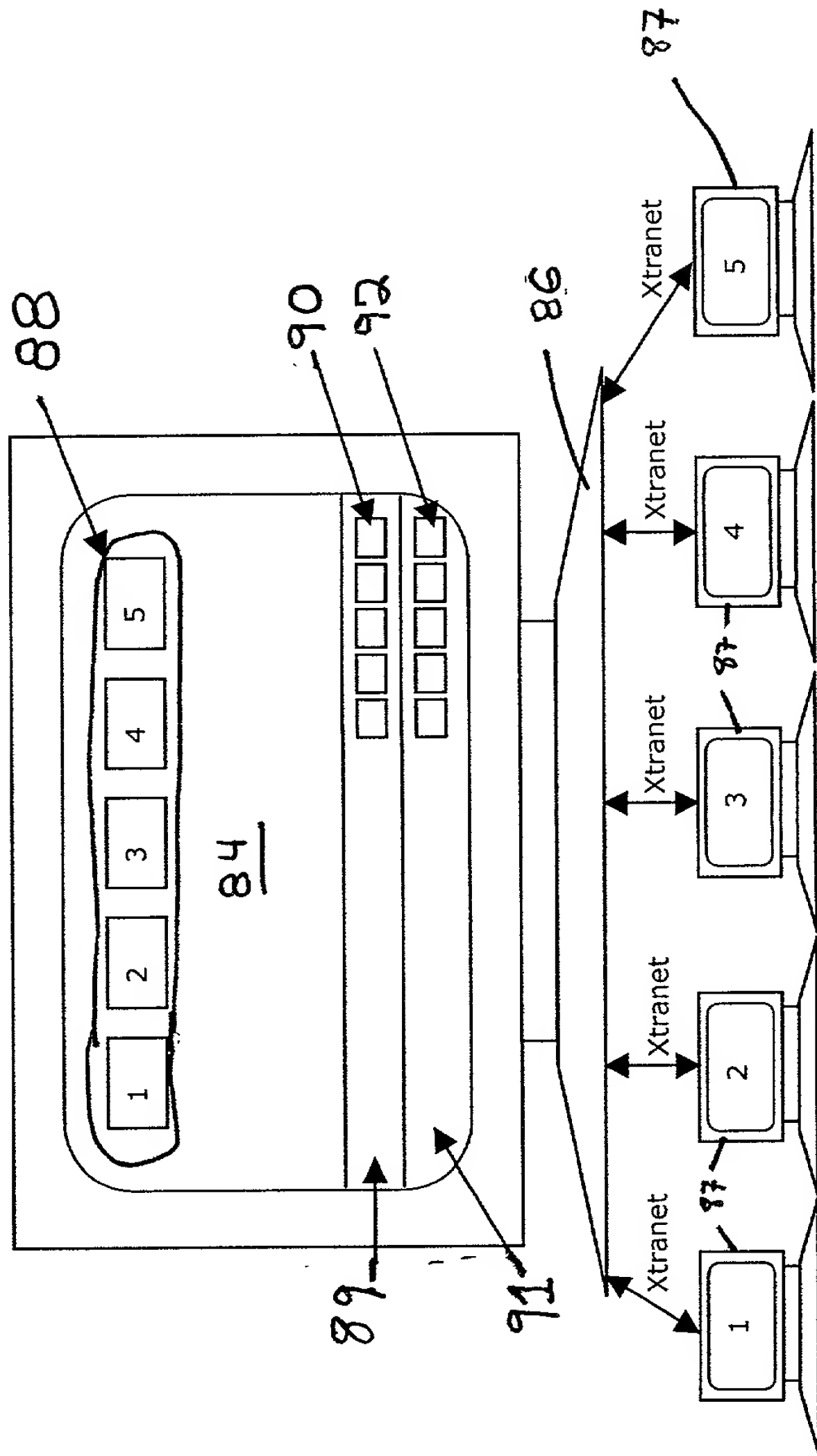


FIGURE 1G

58

52

60

MEMORY

DIAGNOSTIC TOOL

66

U

TESTS

102

100

I

SCORER

104

WEB

ADMIN.

106

PAGE

RECOMMENDER

108

MOTIVATOR

62

64

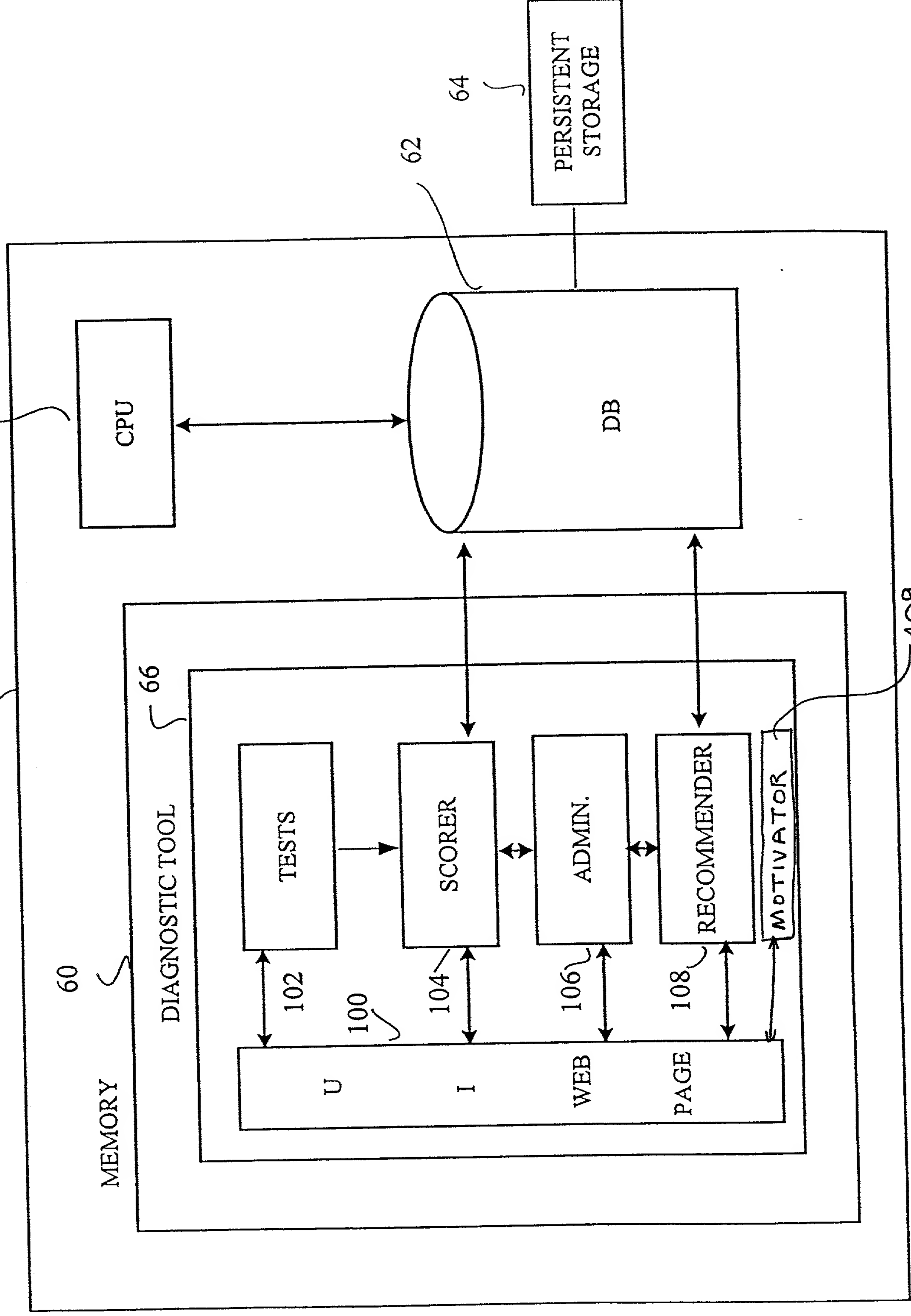
PERSISTENT STORAGE

DB

CPU

109

Figure 2



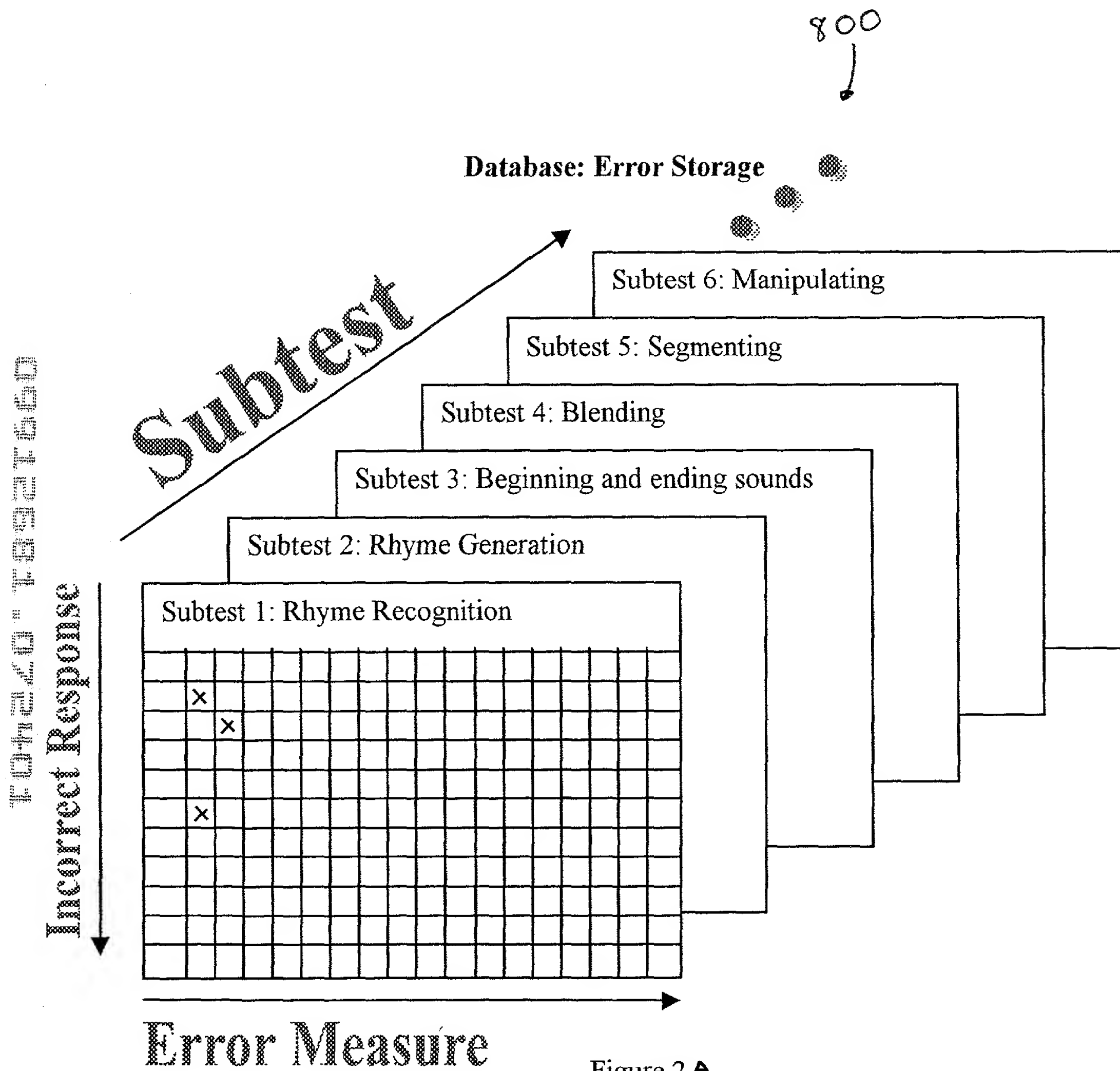
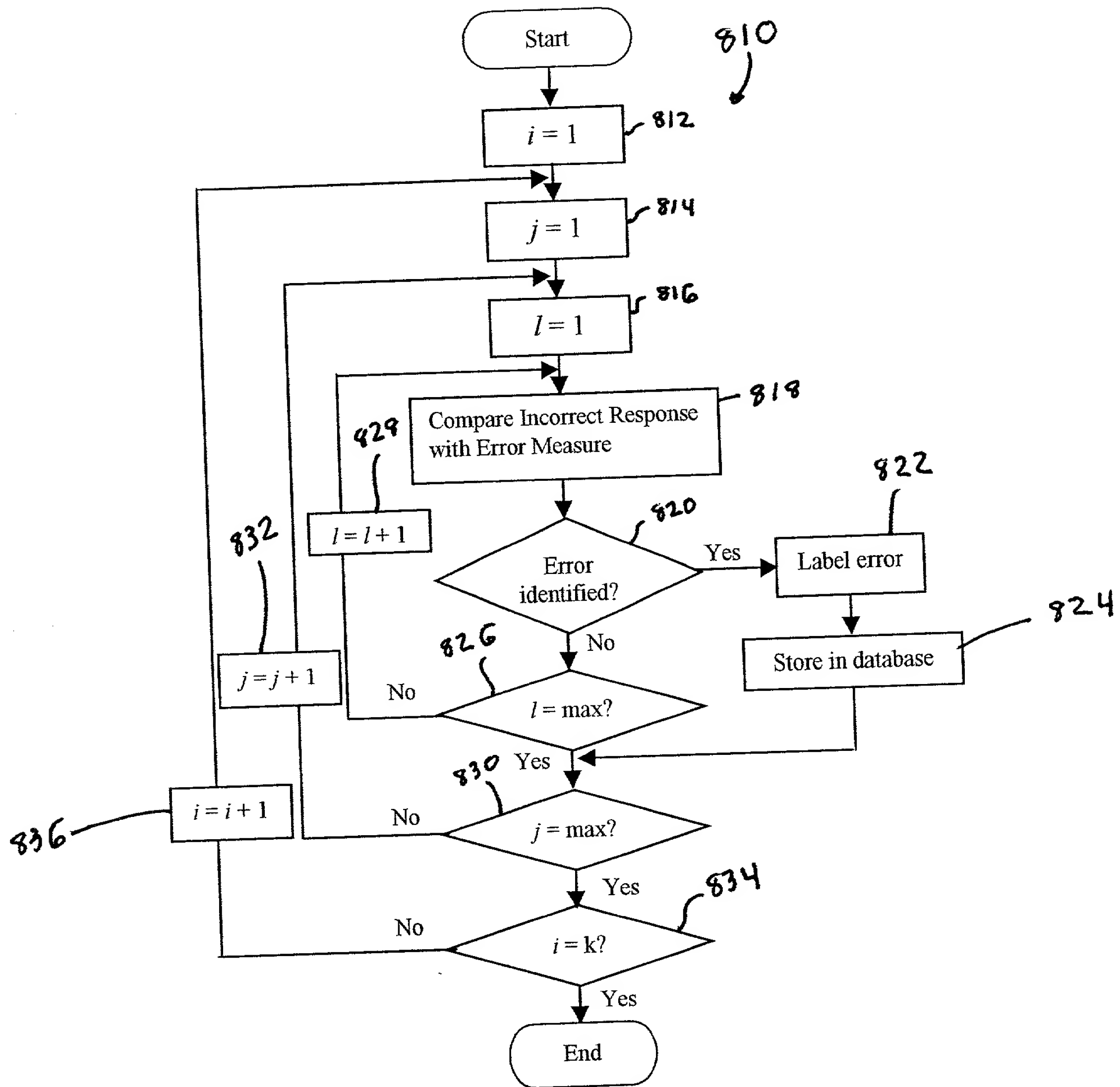


Figure 2 A



(ST)_i: Subtest; $i = 1 \dots k$

(IR)_{ij}: Incorrect Response; $ij = 1.1, 1.2, \dots, 1.\text{max.}, \dots, k.1, k.2, \dots, k.\text{max.}$ ($j = 1 \dots \text{max.}$)

(EM)_{il}: Error Measure; $il = 1.1, 1.2, \dots, 1.\text{max.}, \dots, k.1, k.2, \dots, k.\text{max.}$ ($l = 1 \dots \text{max.}$
Note: max. for l is different from max. for j .)

Figure 2B

IF-THEN Rule Bases

Subtest	Error Measure						
1. Rhyme Recognition	(1)	(2)	(3)	(4)	...		η_1
2. Rhyme Generation	(1)	(2)	(3)	(4)	...		η_2
3. Beginning and Ending Sounds	(1)	(2)	(3)	(4)	...		η_3
4. Blending	(1)	(2)	(3)	(4)	...		η_4
5. Segmenting	(1)	(2)	(3)	(4)	...		η_5
6. Manipulating	(1)	(2)	(3)	(4)	...		η_6
7. Recalling in Sequential Order	(1)	(2)	(3)	(4)	...		η_7
8. Rapid Naming	(1)	(2)	(3)	(4)	...		η_8
9. Letter Names and Sound	(1)	(2)	(3)	(4)	...		η_9
10. Decoding	(1)	(2)	(3)	(4)	...		η_{10}
11. Fluent Reading	(1)	(2)	(3)	(4)	...		η_{11}

FIGURE 2C

Subtest	Error Measure ID	Error Measure
3. Beginning and Ending Sounds	2	Do not recognize /f/ when it is at the end following an /i/ sound
4. Blending	3	Can not blend when /f/ is at the end following an /e/ sound
5. Segmenting	4	Do not count /f/ when it is at the end following an /Δ/ sound
6. Manipulating	4	Can not replace /f/ with /v/ when it is at the end following an /e/ sound
7. Recalling in Sequential Order	3	Do not recall /f/ when it is at the end following another consonant.
9. Letter Names and Sound	4	Can not recognize /f/ sound when it is isolated
10. Decoding	2	Cannot recognize the nonsense word when the word ends with a /f/ sound which follows another consonant

FIGURE 2D

DIAGNOSTIC TOOL

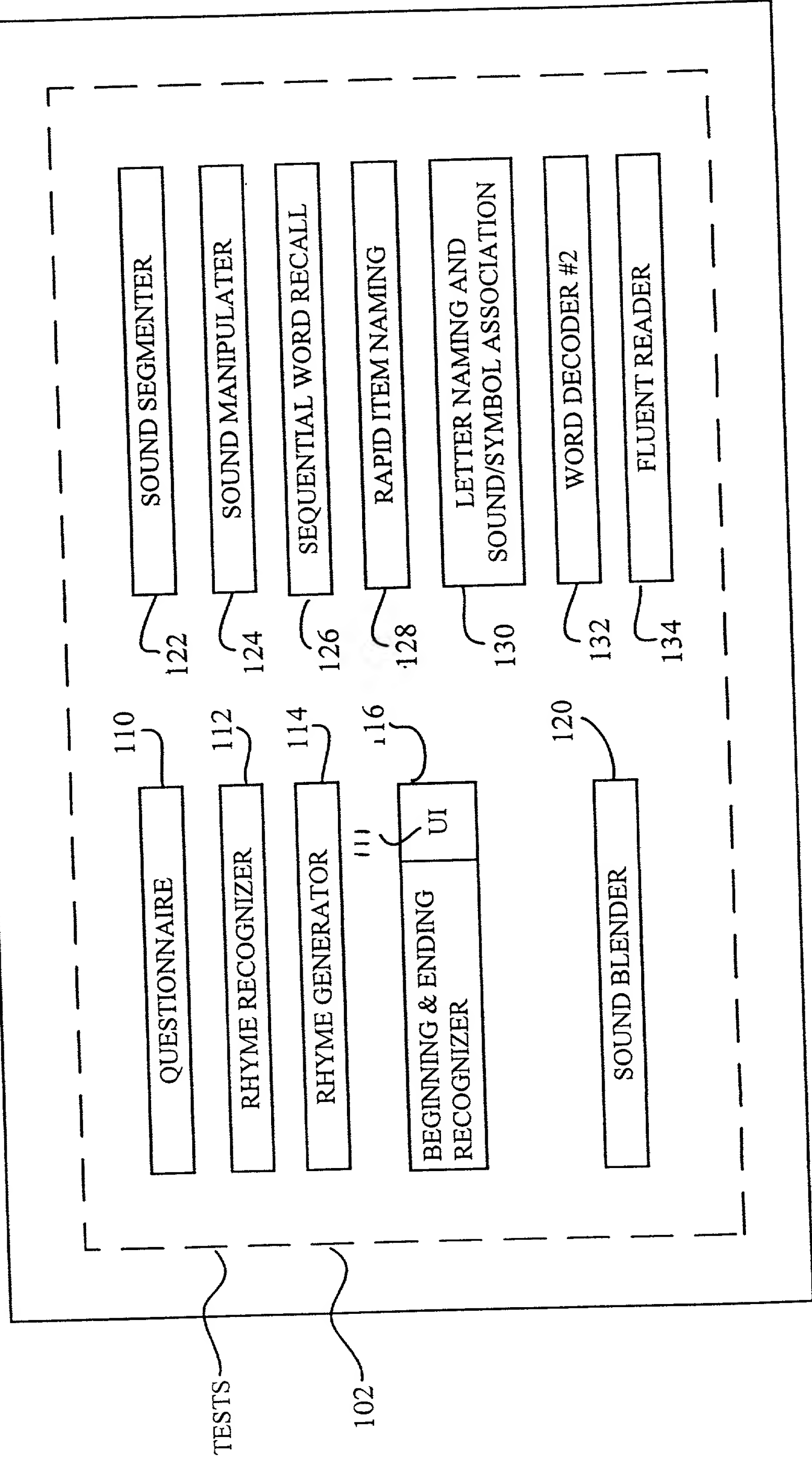


Figure 3

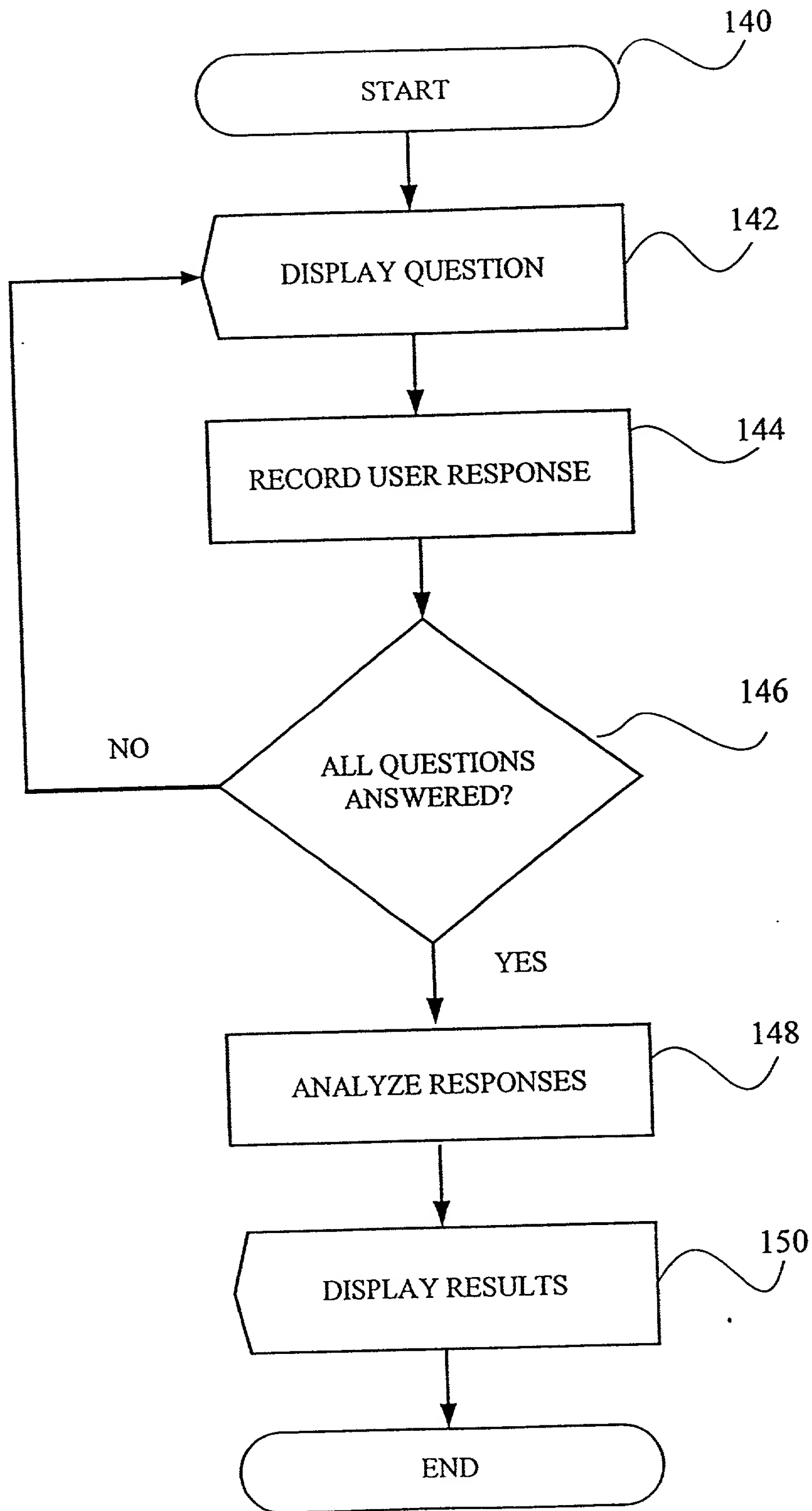


Figure 4

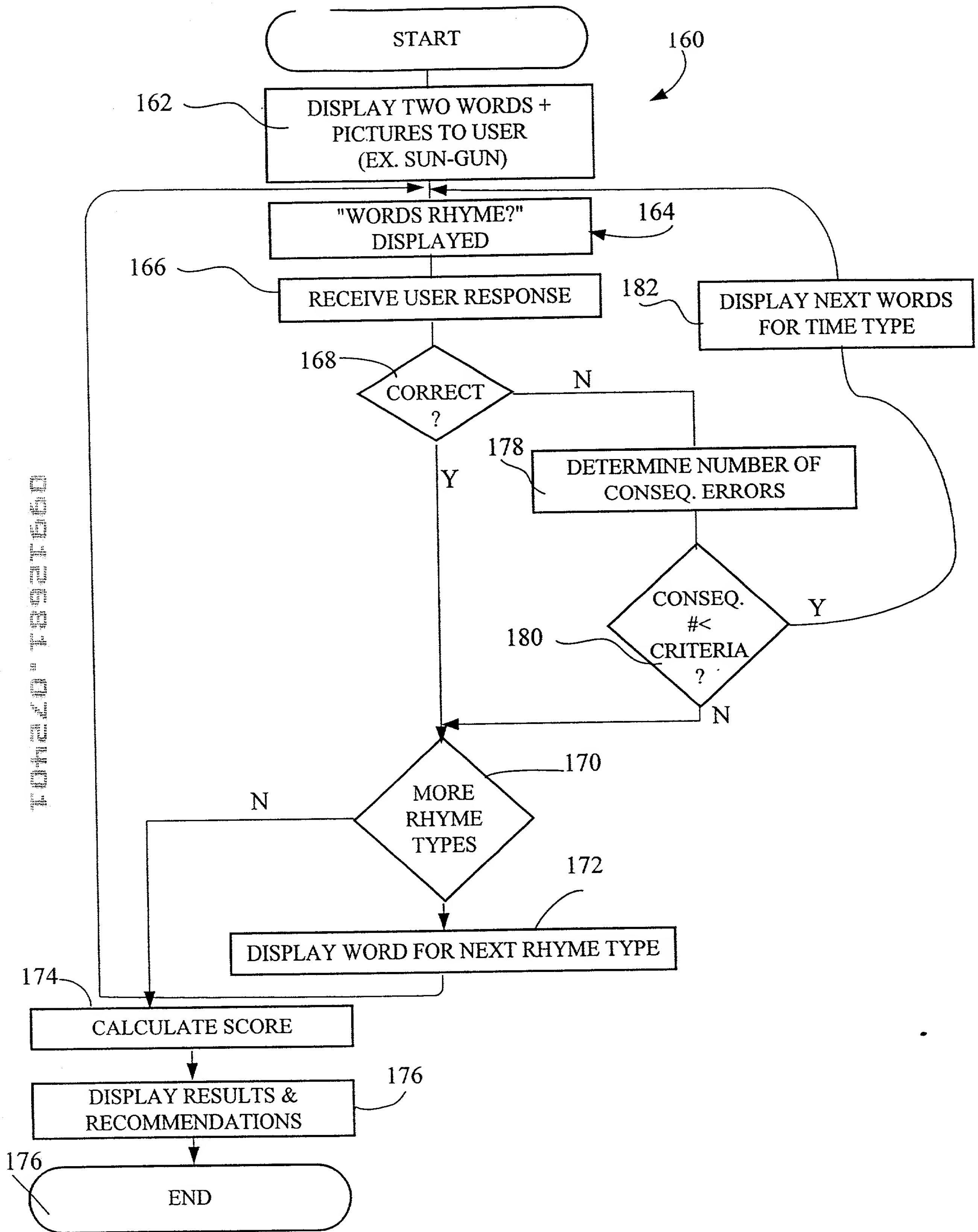
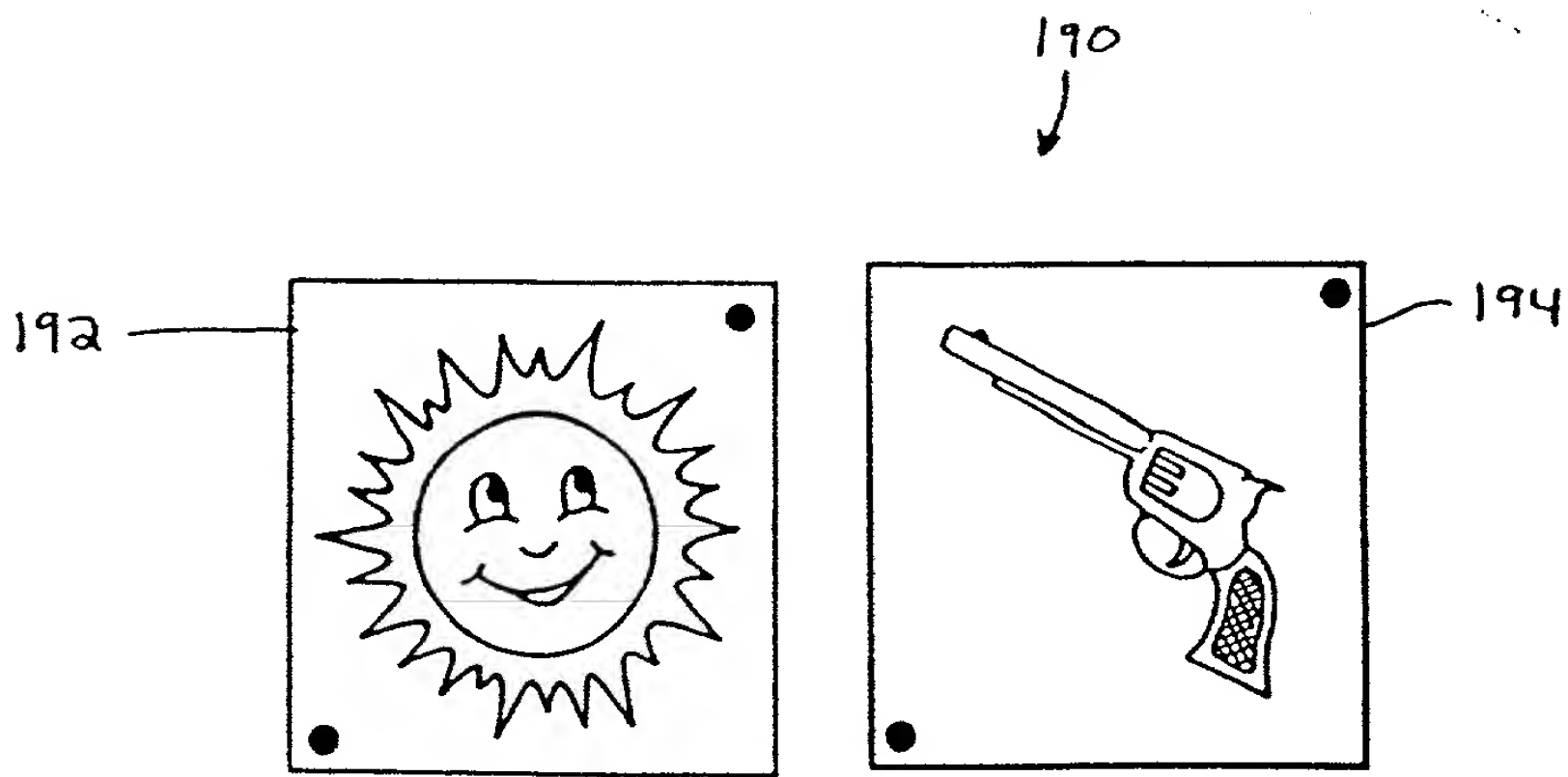


Figure 5



WORDS RHYME? } 196

198 YES NO 200

Figure 6

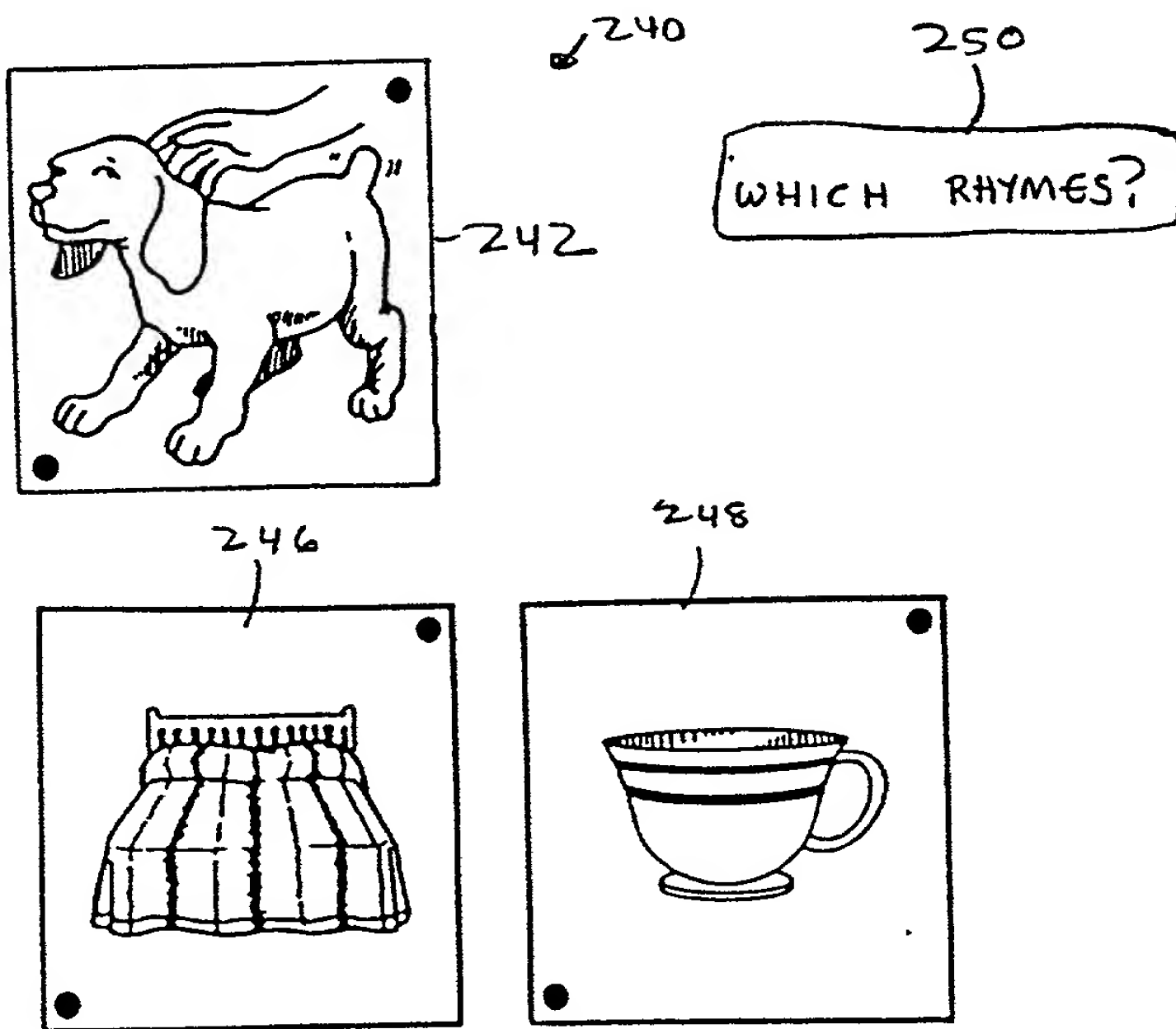


Figure 8

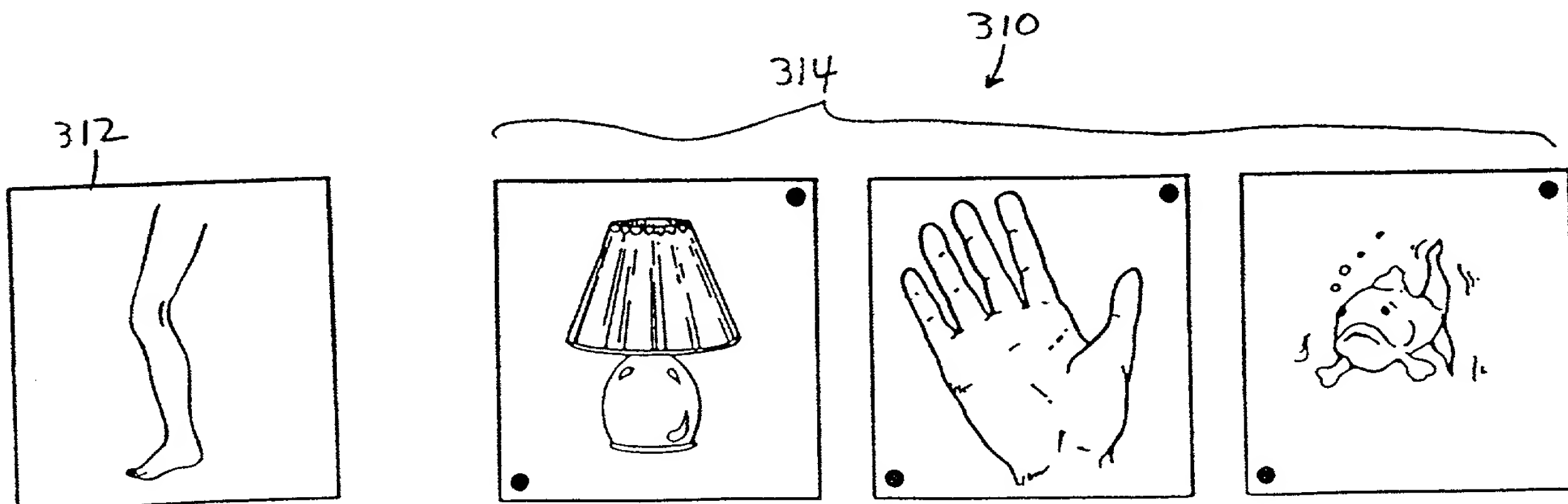


FIGURE 10

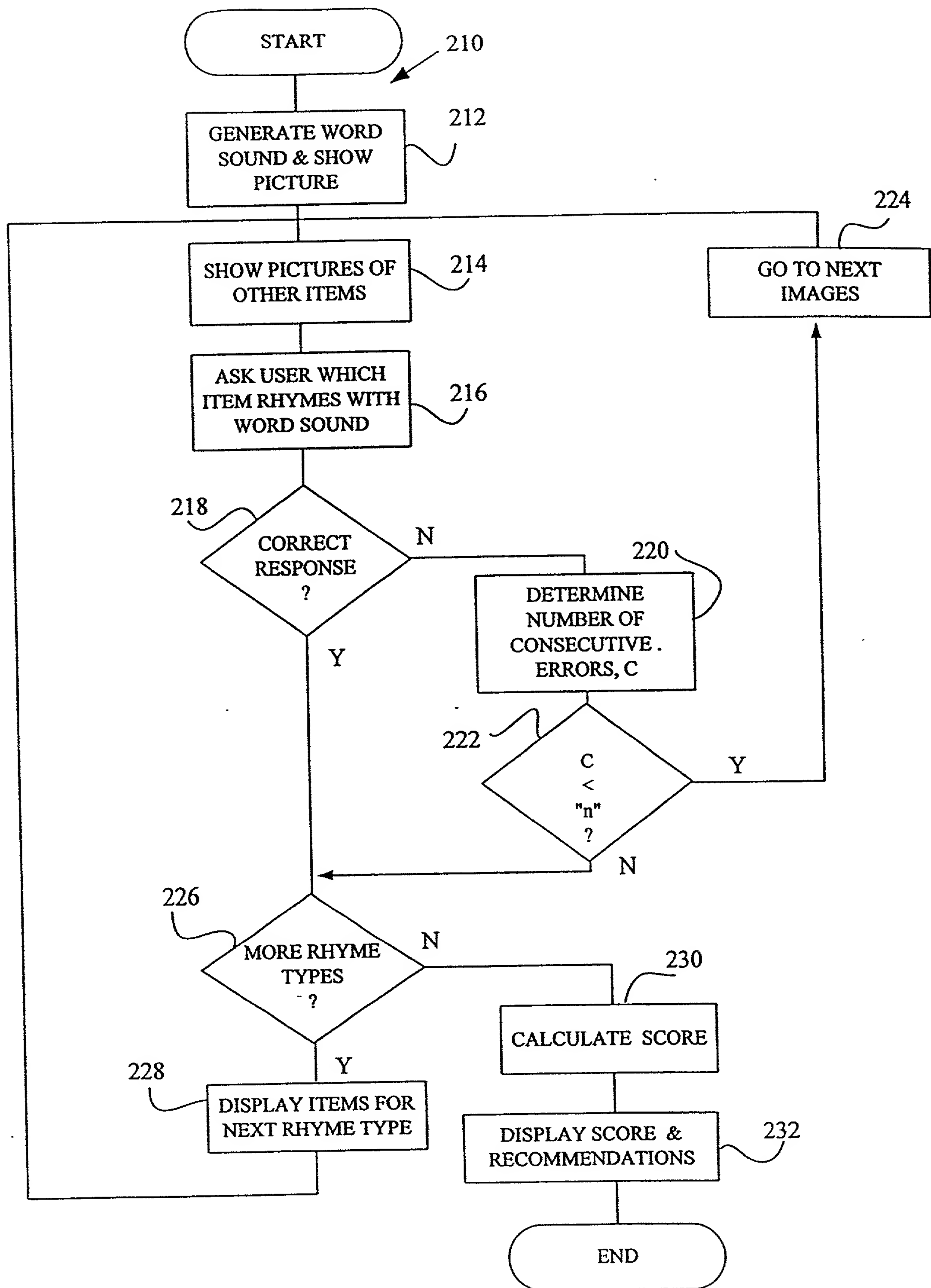


Figure 7

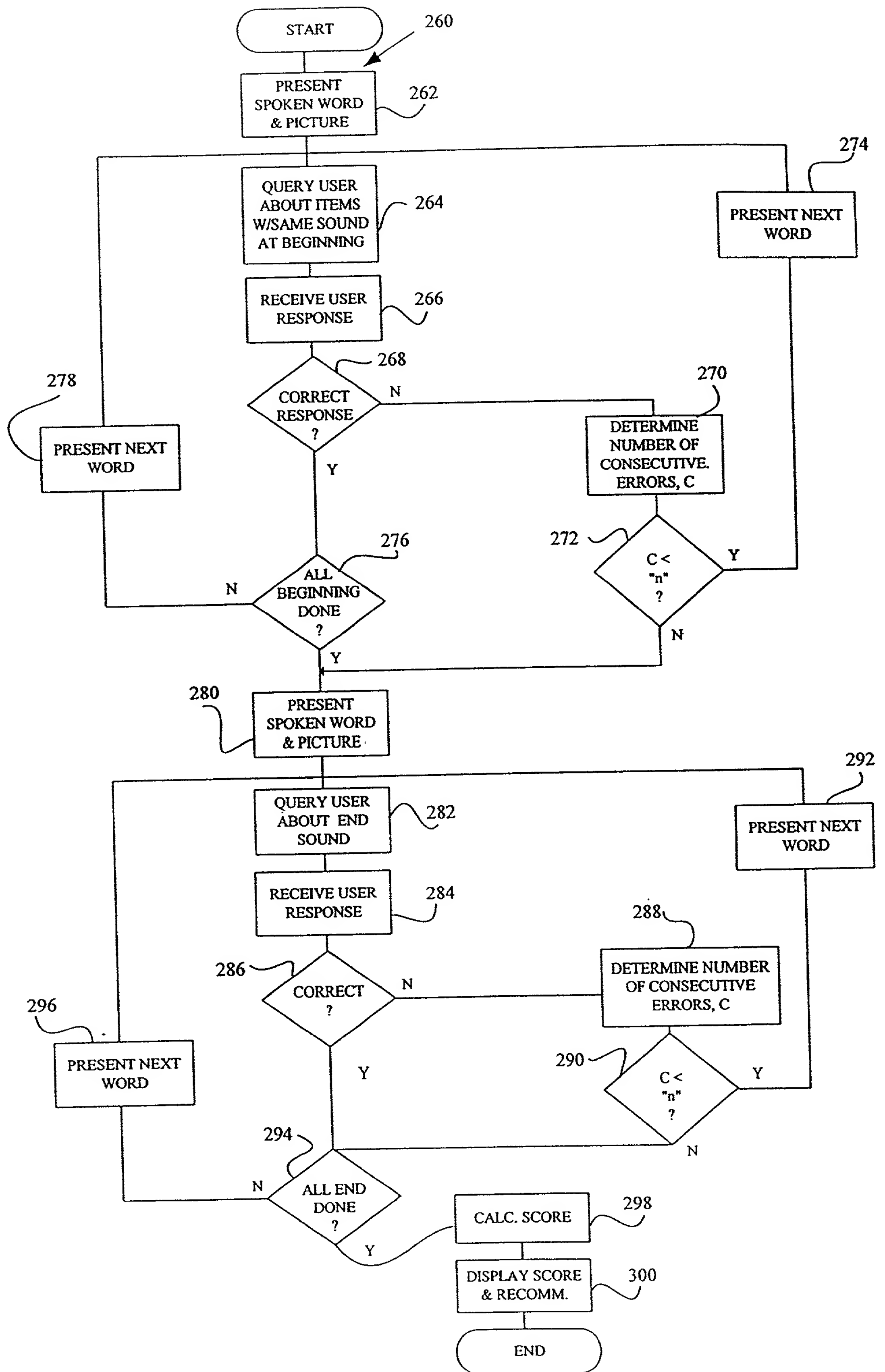


Figure 9

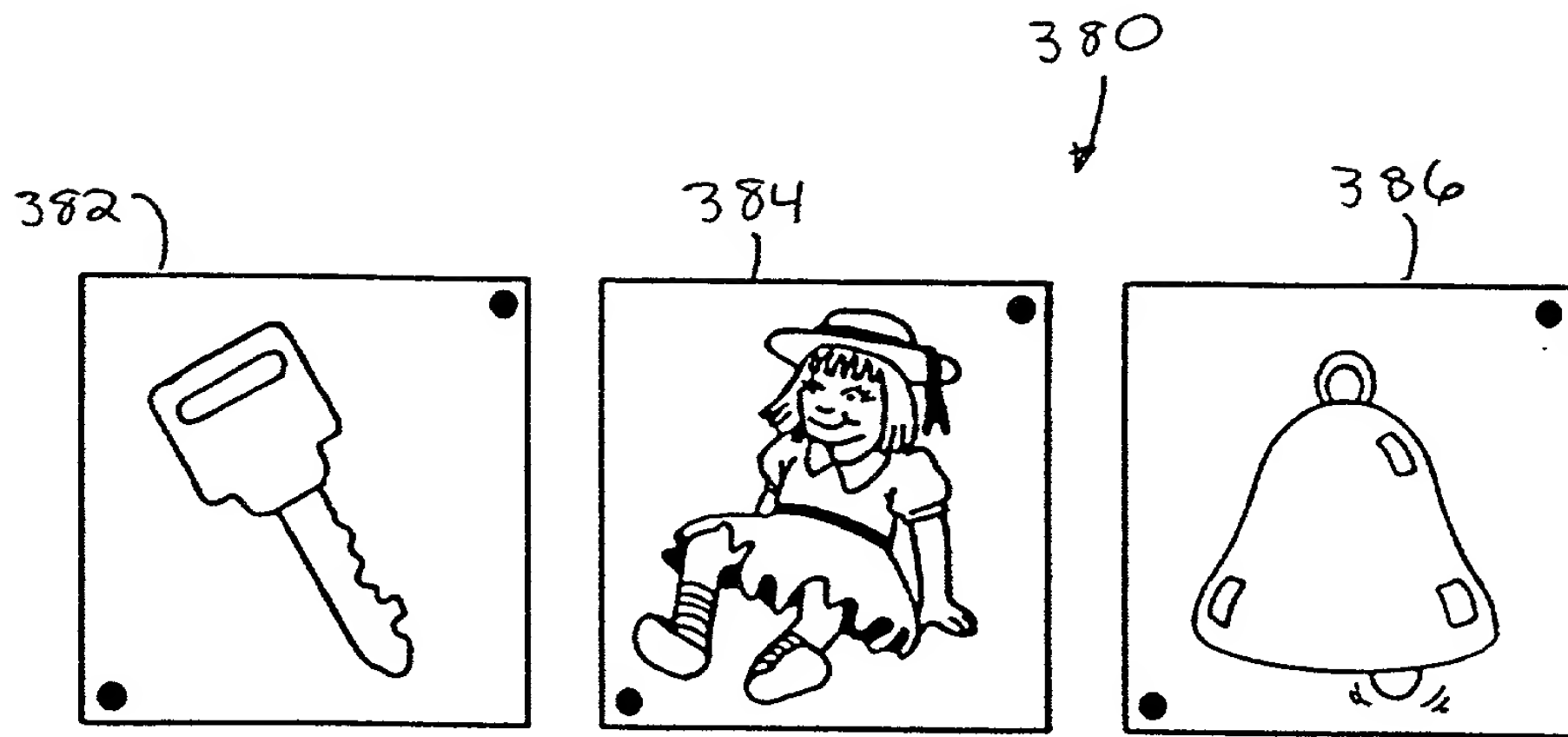


Figure 12

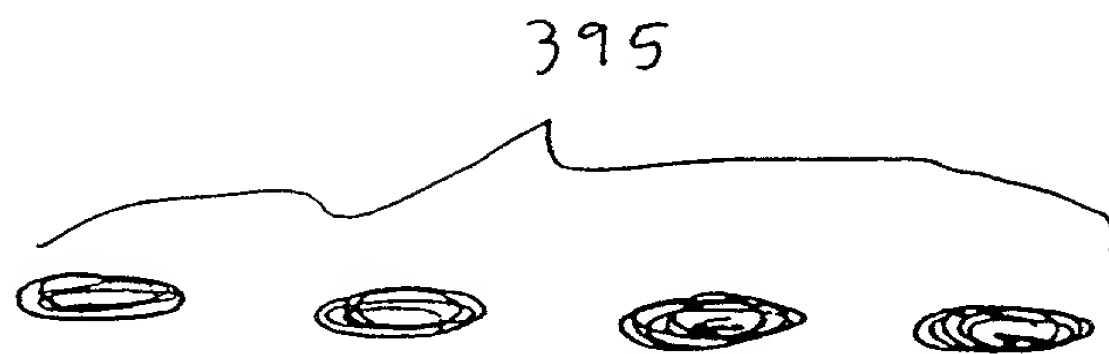


Figure 14

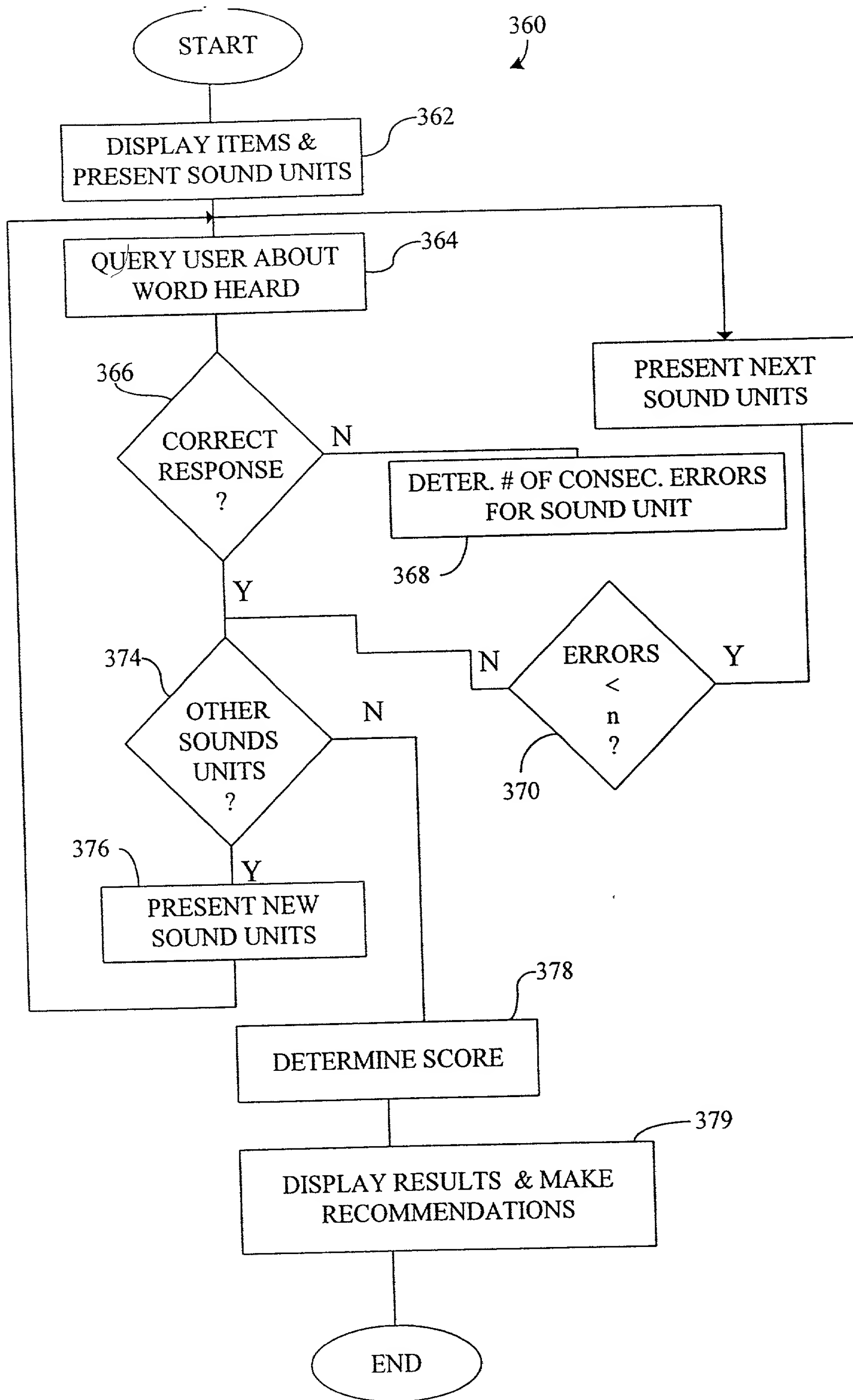


Figure 11

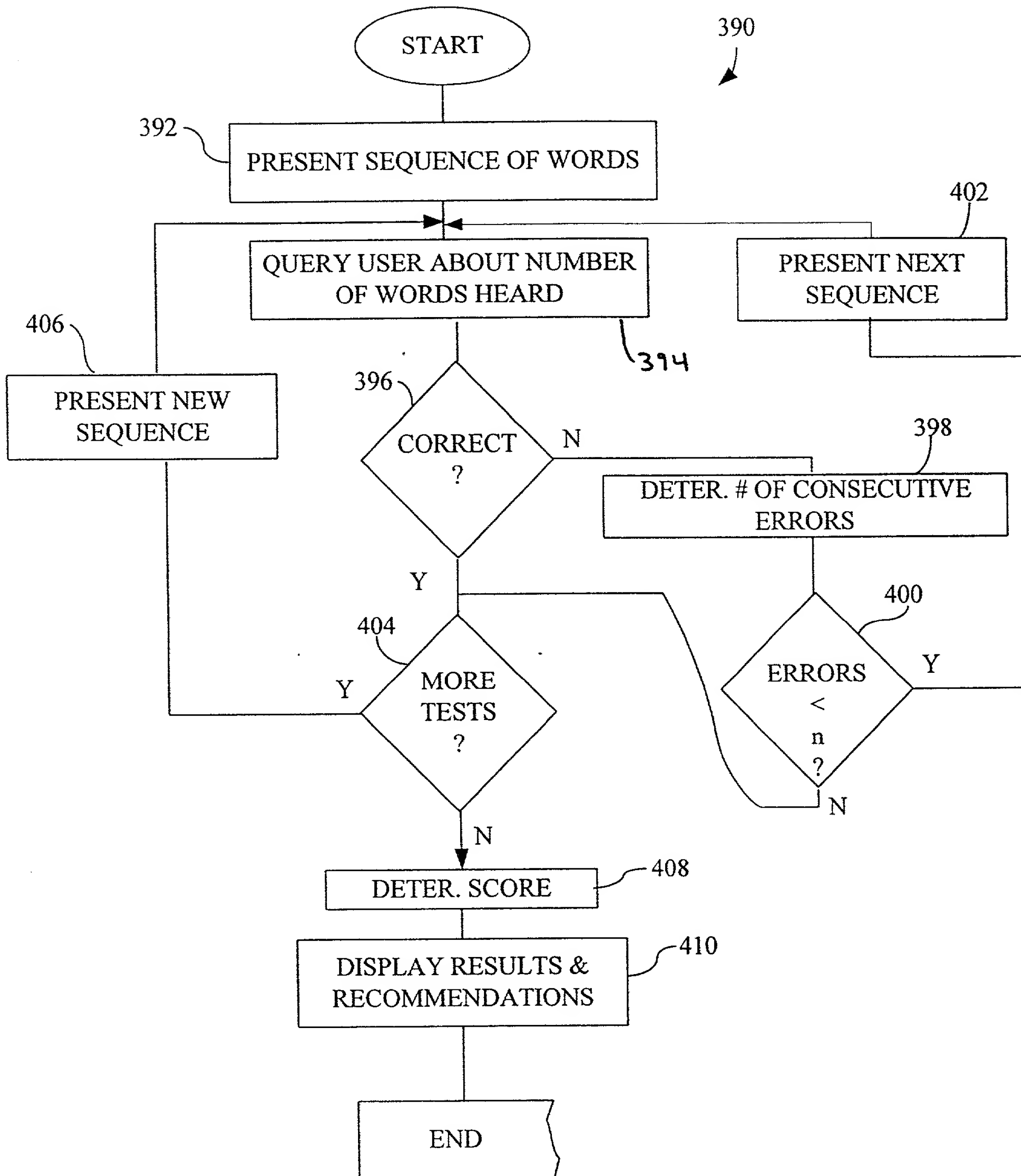


Figure 13

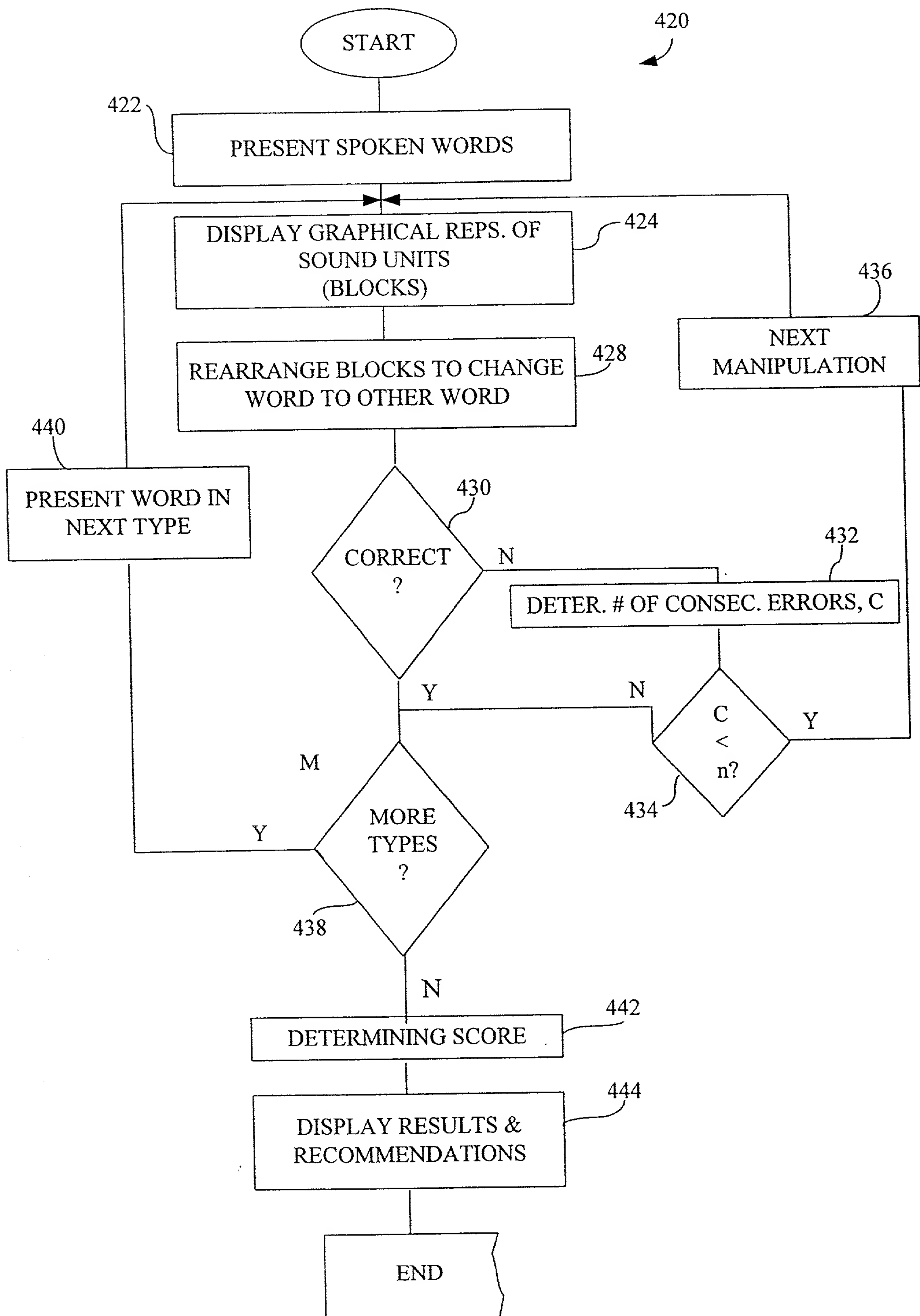


Figure 15

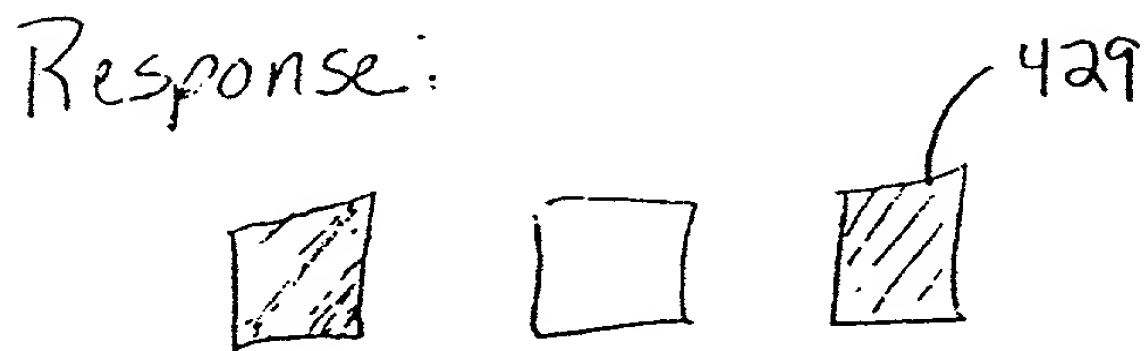
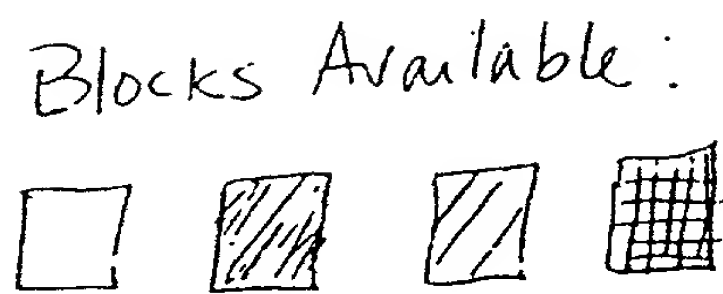
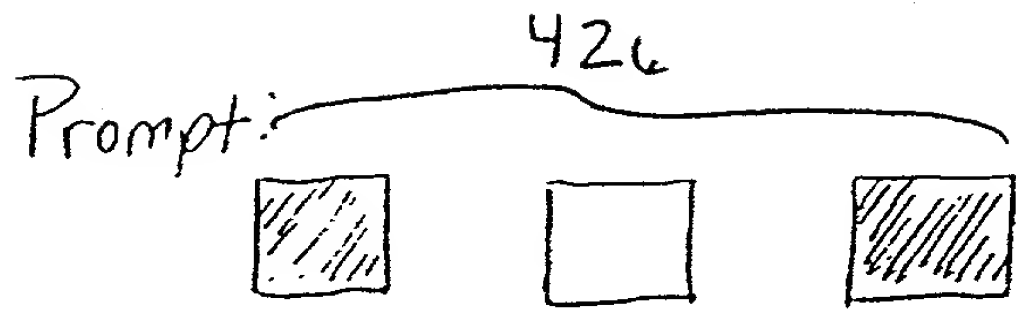


Figure 16

1	6	2
4		9
5	8	3

Figure 18

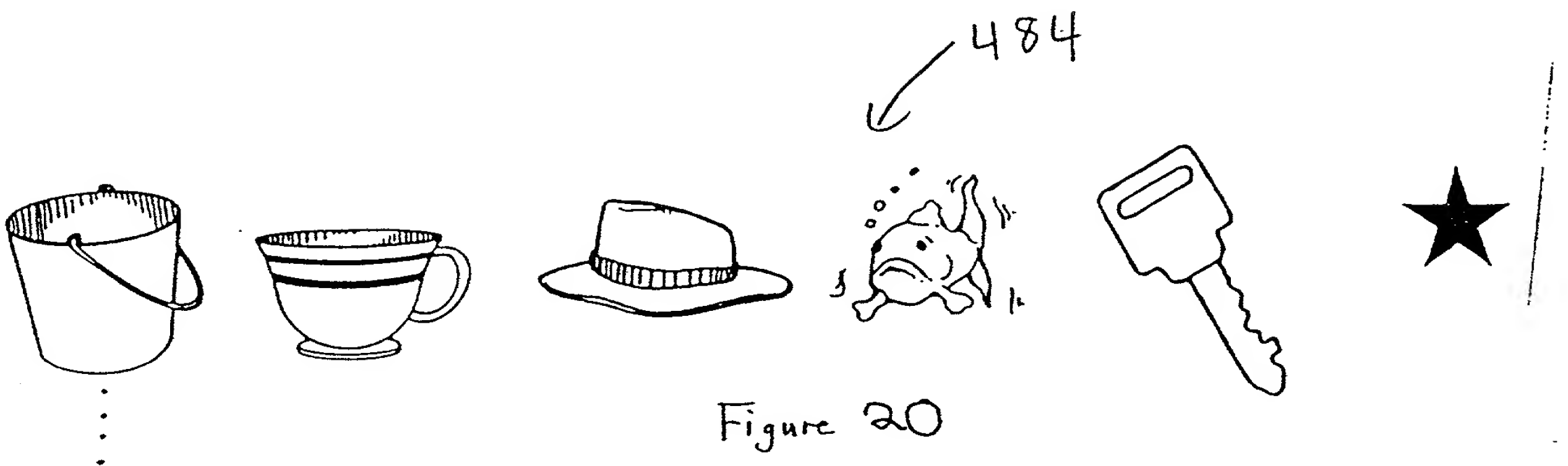


Figure 20

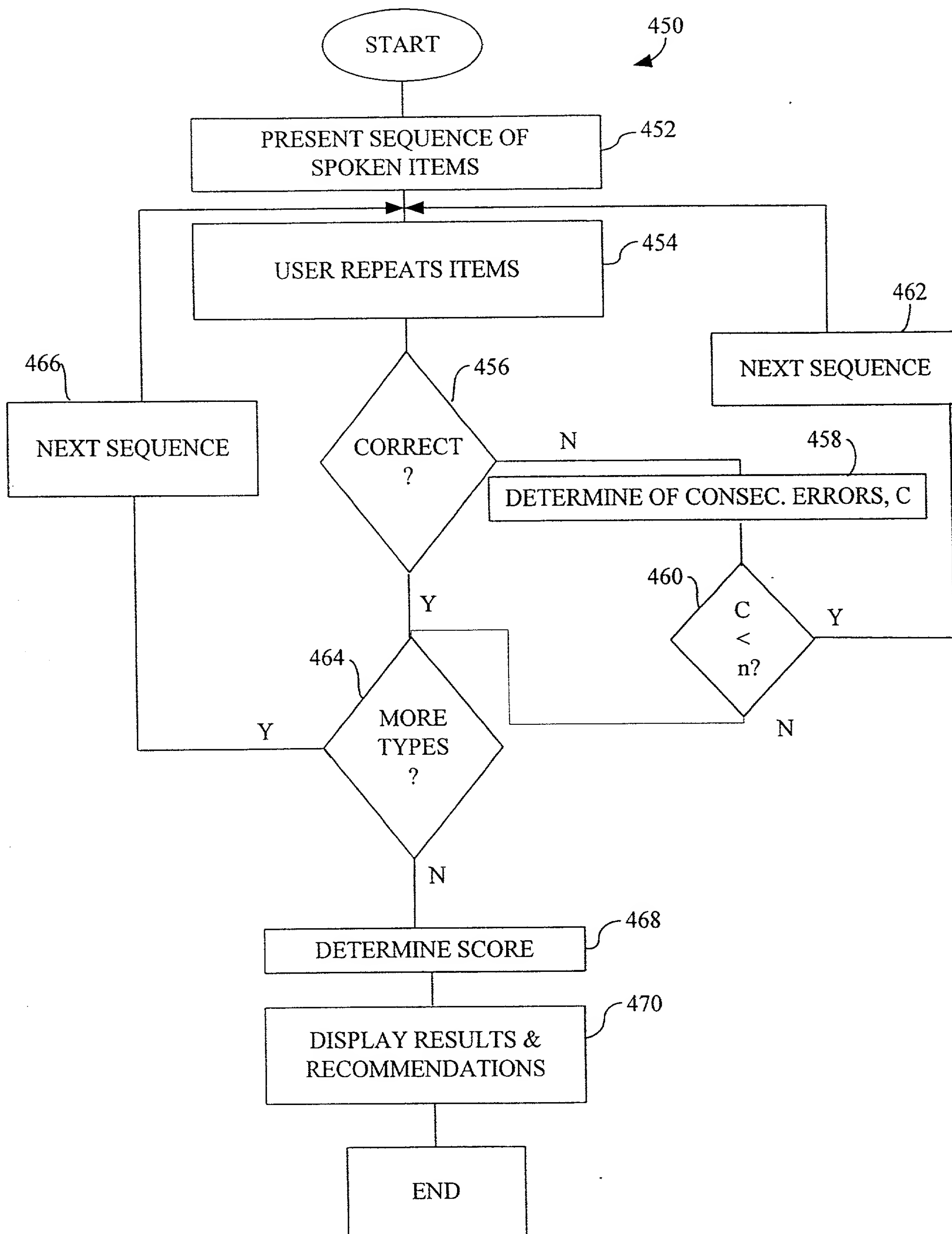


Figure 17

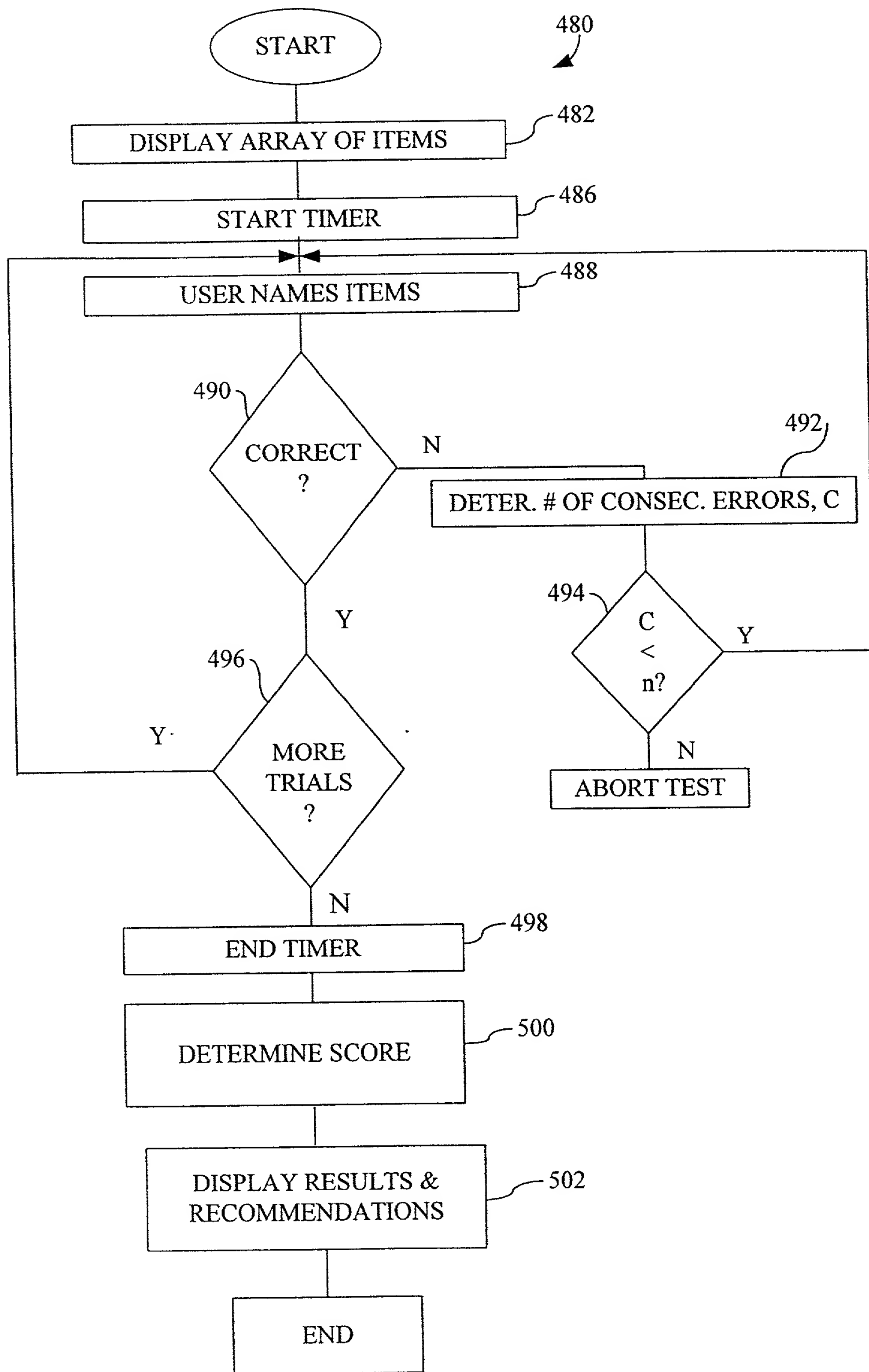


Figure 19

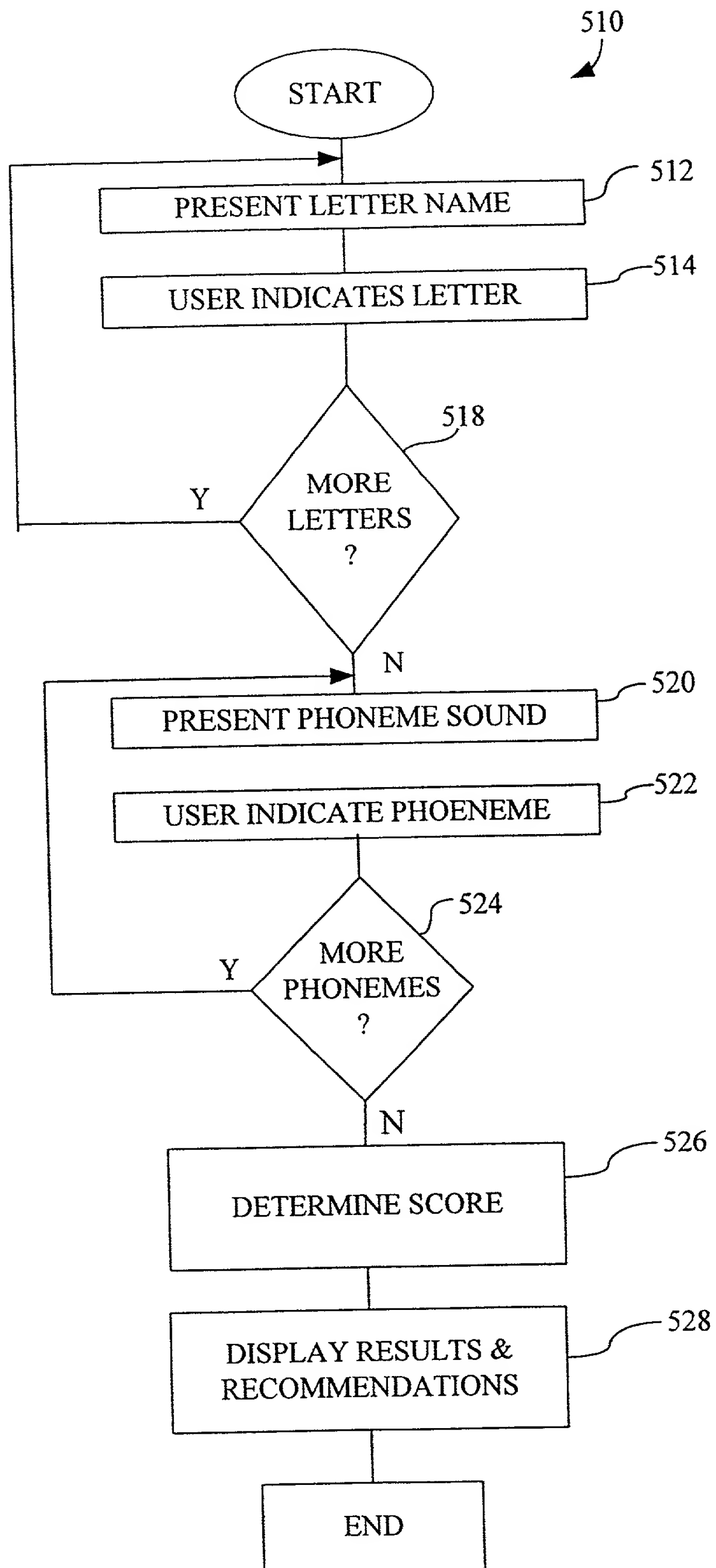


Figure 21

A B C D E F
 G H I J K L
 M N O P Q R
 S T U V W X Y Z

516

Figure 22

taf cag dop mib

533

Figure 24

Does a dog have four legs?] 564

YES NO

566

Figure 26

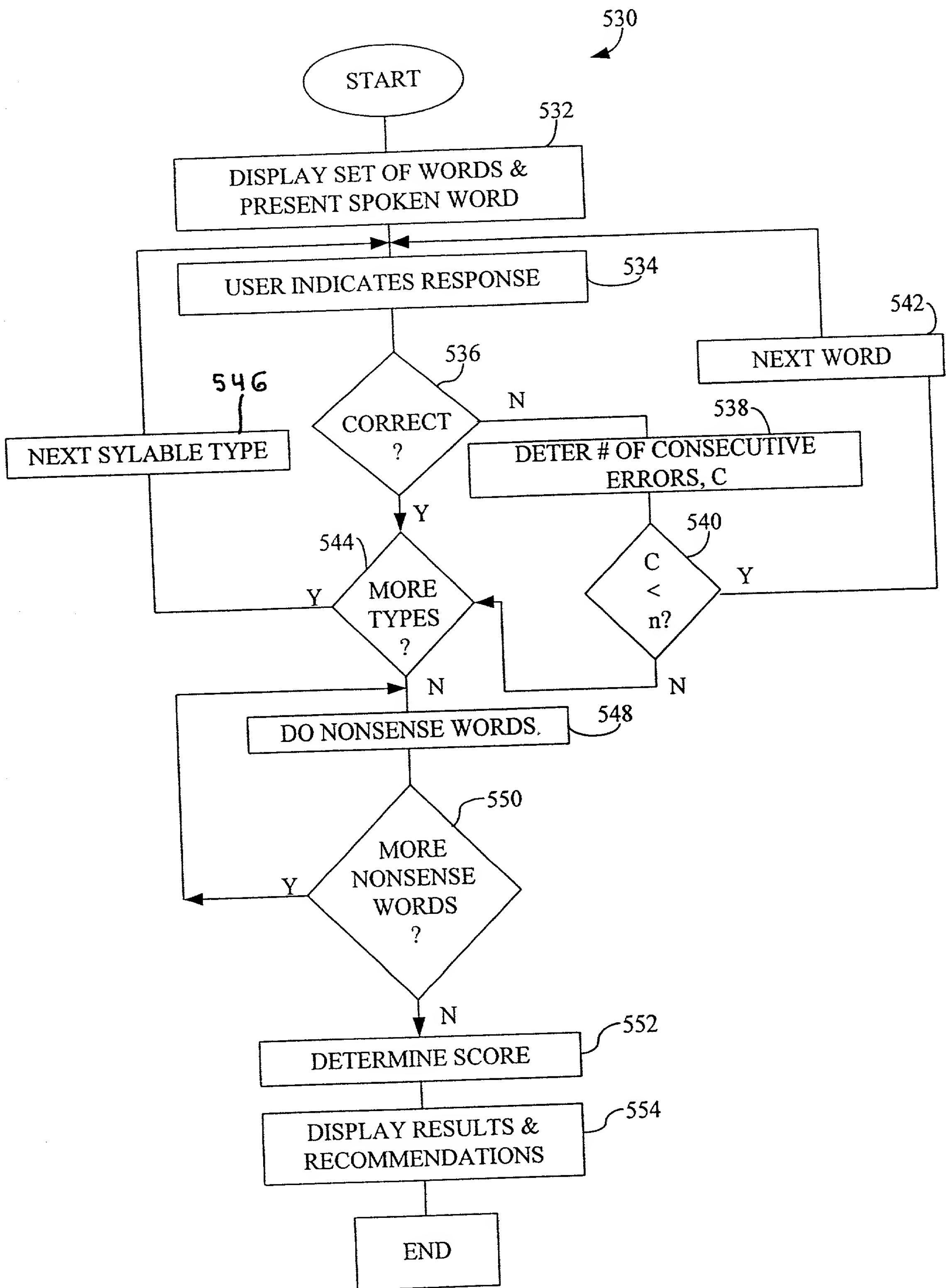


Figure 23

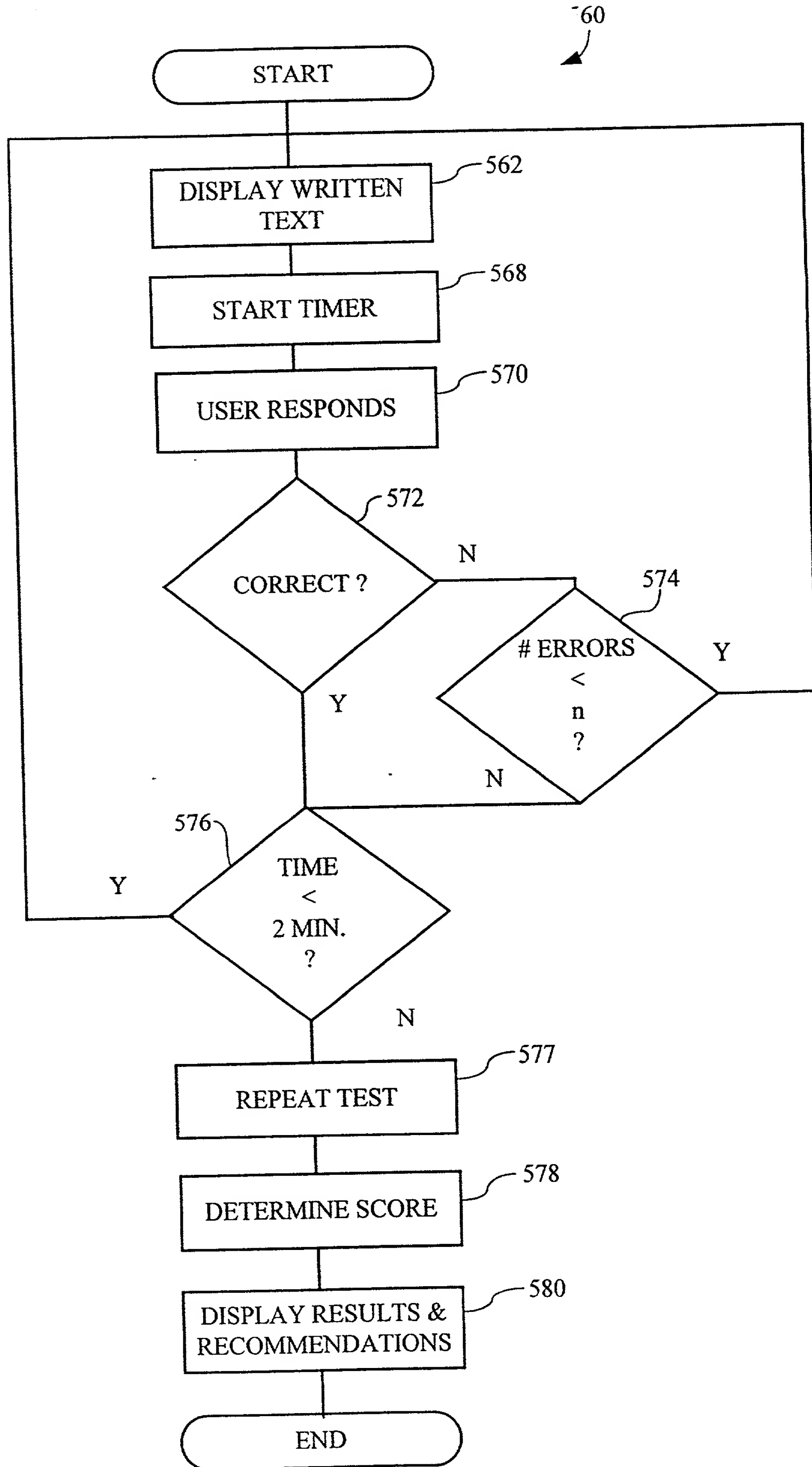


Figure 25

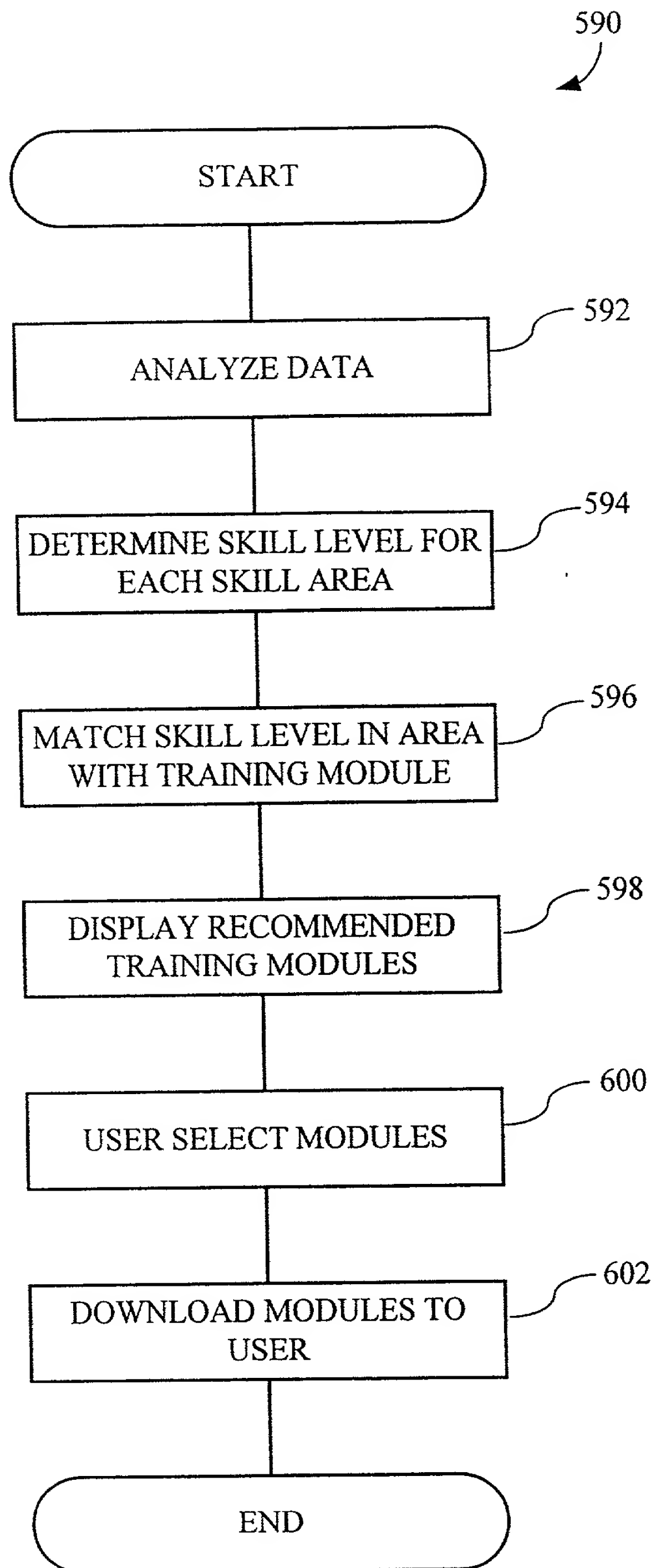


Figure 27

FIG. 28

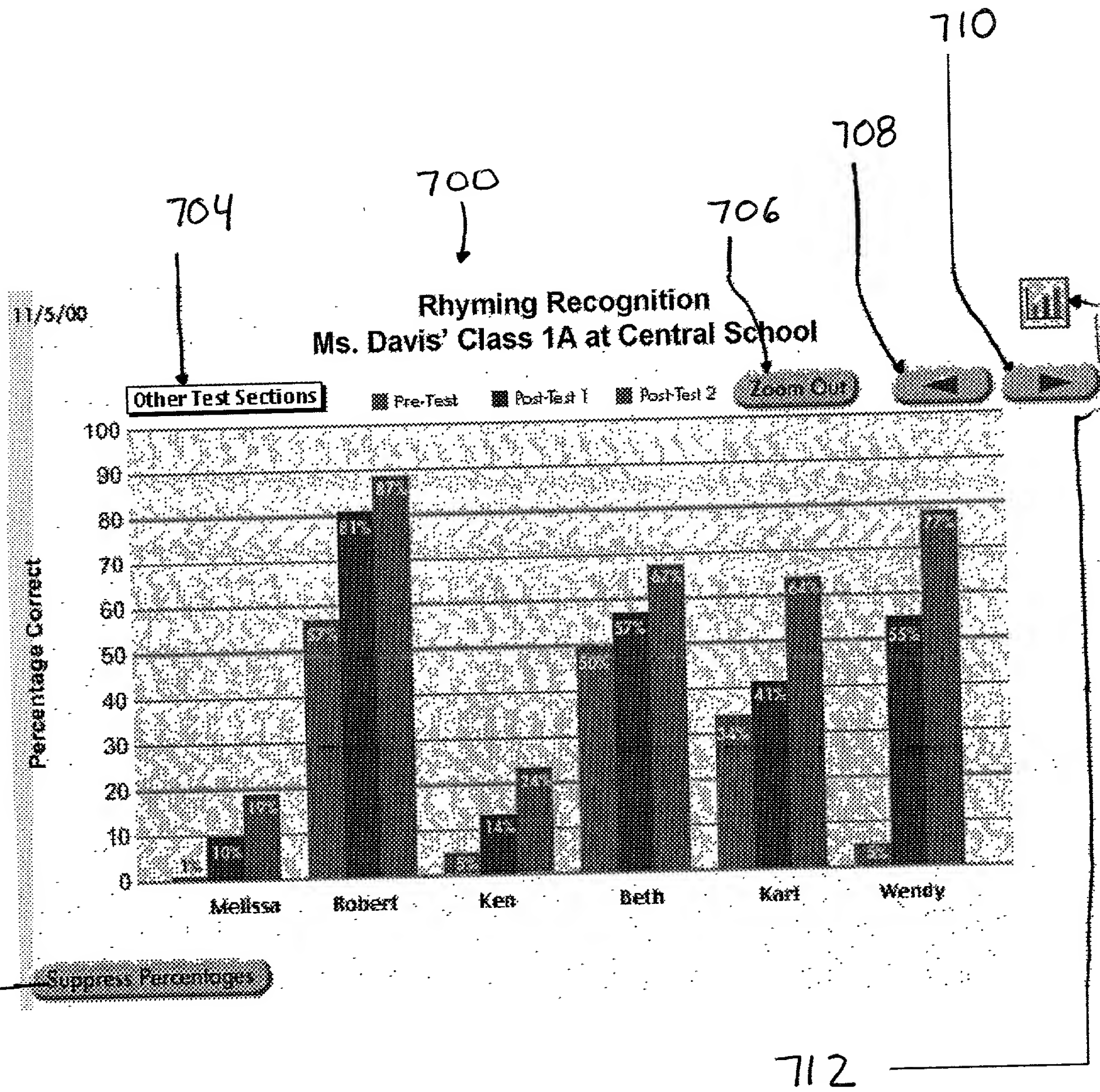


Figure 28

